DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015525 Address: 333 Burma Road **Date Inspected:** 30-Jun-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 **Component:** OBG 13 section

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

Bay #6

Caltrans QA Inspector observed two ZPMC welders in process SMAW CJP process on west jacket frame (WJF) leg. The CJP weld is designed single bevel with back bar welded in flat position. The WJF and weld ID is WJF-0-182~184. The SMAW welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA inspector observations, no discrepancies were noted.

Caltrans QA inspector observed a fit up groups performed fit up and SMAW tack weld process on cover plate of WJF box. The weld is designed T-joint is attached to WJF box with seal weld. The WJF box ID is WJF-0-457.A numerous temporary tack welds have been welded attach between T joint after adjusted and secured by hand jack. The fit up SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Caltrans QA Inspector observed a welder performed FCAW repair fillet weld process on stiffeners that connected to T-joint steel plate PL3226 of side plate #SP3037A. A numerous spots have been marked by ZPMC QC that require additional welding and grinding due to arc strikes, under fill and undercut exceeding AWS code limitations. The FCAW repair welding was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Bay#7

Caltrans QA Inspector observed three welding operators in process of semi-automatic FCAW on stiffeners. The stiffener weld is designed PJP with T-joint weld and located on the bottom plate. The bottom plate and stiffener weld ID is SP3068A/SP3060-001-014~047. All of PJP joint regions have been pre-heating to specific desired temperature prior welding. The semi-automatic FCAW process was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Caltrans QA inspector observed a fit up groups performed fit up and SMAW tack weld process on T-joint fillet weld. The T-joint is attached to stiffeners and edge plate with 22mm wall thick. The edge plate number is EP3014A. A numerous temporary tack welds have been welded attach between side plate and stiffeners after adjusted and secured by hand jack. The fit up SMAW tack welding process were monitored and recorded by ZPMC and ABF QC inspector. Base on Caltrans QAI observation, no discrepancies were noted.

Bay#8

Caltrans QA inspector observed a ZPMC welder performed FCAW PJP process on OBG flatness retrofit plate type A3. The weld is designed T-joint plate to plate with PJP weld. Total four retrofit plate type A3 have been completed the welding. The plate ID is A3-8/9/10/11. The region of the weld joint has been pre-heating to specific desired temperature prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Caltrans QA inspector observed a ZPMC welder performed FCAW CJP process on the flange to flange for floor beam of cross beam # CB17. The weld ID is FB3058-053-036. The region of the weld joint has been pre-heating to specific desired temperature prior FCAW welding. The FCAW process were monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QA Inspector observations, no discrepancies were noted.

Caltrans QA Inspector performed QA final VT and dry MT testing on the CJP and fillet welds of OBG travel rails. The ZPMC inspection request number is 06085. The traveler and welds ID are 11TR5-001-001/002/005~014, 11TR12-001-001/002/005~014, 11TR3-008-005/002/005~014 and 10TR5-002-001/002/005~014. All the CPJ and fillet welds have been accepted by ZPMC and ABF prior Caltrans QA inspection. Base on Caltrans VT and MT test, the welds appeared to be in compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As notes within report above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey 15000026784, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Inspected By: Pau,Wai Quality Assurance Inspector

Reviewed By: Clifford,William QA Reviewer